

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

March 27, 2008

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: James D. Smith, Environmental Scientist

RE: 2007 Fourth Quarter Water Monitoring, PacifiCorp, Deer Creek Mine. C/015/0018,
Recurring Task ID #2711

The Deer Creek Mine monitoring plan is described in Appendix A of Volume 9 of the MRP.

1. Were data submitted for all of the MRP required sites?

Springs YES ☒ NO ☐

The valve on NEWUA Meter 2 was not functioning during the fourth quarter 2007, so no samples were collected

Streams YES ☒ NO ☐

Wells YES ☒ NO ☐

UPDES YES ☒ NO ☐

In-mine YES ☒ NO ☐

2. Were all required parameters reported for each site?

Springs YES ☒ NO ☐

Streams YES ☒ NO ☐

Wells YES ☒ NO ☐

UPDES

YES ☒ NO ☐

In-mine

YES ☒ NO ☐

3. Were any irregularities found in the data?

Listed parameters were outside two standard deviations. An asterisk (*) indicates this is not a parameter specifically required by the MRP.

Springs

YES ☒ NO ☐

Burnt Tree October: field specific conductivity
Ted's Tub October: field specific conductivity, NA, and lab specific conductivity*;
Little Bear October: Ca, Mg, and total hardness,
79-2 October: field specific conductivity;
79-10 October: field specific conductivity and bicarbonate as CaCO₃;
79-15 October: field specific conductivity;
79-28 October: field pH, field specific conductivity, and Na;
79-35 October: field specific conductivity
80-47 October: field specific conductivity
82-52 October: field specific conductivity
89-61 October: field specific conductivity
89-67 October: field specific conductivity
91-72 (not a required site?) October: field specific conductivity and bicarbonate as CaCO₃;
JV-9 October: total alkalinity*;
MF-7 October: Mg and cation-anion balance;
MF 213 October: Mg;
MFR-10 October: Mg;
RR 23A October: water temperature, Ca, Mg, total hardness.

Streams

YES ☒ NO ☐

DCR04 October and December: flow;
DCR06 October and December: flow;
HCC01 December: field specific conductivity and lab specific conductivity*;
HCC02 December: lab specific conductivity*;
RCF3 December: field specific conductivity, Ca, acidity*, SO₄, total hardness, lab specific conductivity*, TDS, total cations*, and total anions*;
RCW4 December: field specific conductivity, Ca, Mg, K, SO₄, total hardness, lab

specific conductivity*, TDS, total cations*, and total anions*.

Wells YES ☒ NO ☐

DCWR1 December: field pH and acidity*.

UPDES YES ☒ NO ☐

UT0023604-001 November 1: field pH. Additional samples were taken at this discharge point on November 20 and 24 because the November 1 sample exceeded the UPDES limit for TSS. The mine reported a 7-day exceedence to the Division of Waster Quality because of the initial sample, but the average of the three samples was within UPDES 30-day average limit. The high value of 38 mg/L was not outside two standard deviations from the mean.

UT0023604-002 November: bicarbonate as CaCO₃;

UT0023604-002 December: bicarbonate as CaCO₃.

In-mine YES ☒ NO ☐

Main North-Main East December: Mg, SO₄, total hardness, total cations*.

4. On what date does the MRP require a five-year resampling of baseline water data.

Baseline analyses were performed in 2001 and are to be repeated every 5 years; baseline analyses were done in 2006 and should be done again in 2011: renewal submittal due 10/07/10, renewal due 02/07/11.

5. Based on your review, what further actions, if any, do you recommend?

field specific conductivity measurements were higher than usual at several sites. The Permittee needs to evaluate the field methods and instruments as possible sources for this variation.

6. Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements? YES ☐ NO ☒

7. Follow-up from last quarter, if necessary.

None.

8. Did the Mine Operator submit all the missing and/or irregular data (datum)?

Yes.

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